## AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for operating an electronically controlled variable optical attenuator (eVOA) inserted in an optical path of an optical signal ~~propagating in an optical network~~, the method comprising the steps of:

monitoring an optical signal power at an output of the eVOA;

if the monitored optical signal power is below a loss of signal (LOS) power threshold,

setting the attenuation of the eVOA to a substantially maximum attenuation (MaxAtt); and

modulating the attenuation of the eVOA~~, the modulating comprising~~ by decreasing and increasing the eVOA attenuation in steps until the optical signal power is detected above the LOS power threshold, or athe maximum ~~eVOA~~ attenuation (MaxAtt) is reached.

2. (canceled)

3. (original) A method as described in claim 1, wherein the step of monitoring comprises a step of operating the eVOA so as to maintain said optical signal power if the measured optical signal power is above the LOS power threshold.

4. (original) A method as described in claim 1, wherein the step of monitoring the eVOA attenuation comprises a step of storing said eVOA attenuation.

5. (original) A method as described in claim 1, wherein the step of modulating the eVOA attenuation by decreasing and increasing the attenuation in steps comprises a step of determining a maximum number of steps "$S_1$" for decreasing the attenuation, a maximum number of steps "$S_2$" for increasing the attenuation, an attenuation value per step "$A_s$", and a predefined protection attenuation (PPA).

6. (original) A method as described in claim 5, wherein the step of modulating the eVOA attenuation in steps comprises decreasing the attenuation in steps, which size is $A_s$, wherein $\{\text{MaxAtt} - \text{PPA}\} \leq S_1 \cdot A_s$.

7. (original) A method as described in claim 5, wherein the step of modulating the eVOA attenuation in steps comprises increasing the attenuation in steps, which size is $A_s$, wherein $\{ S_2 \cdot A_s + \text{PPA} \} \leq \text{MaxAtt}$.

8. (original) A method as described in claim 5, wherein the step of decreasing and increasing the eVOA attenuation in steps comprises a step of checking for a valid optical measured power at the output of said eVOA, the valid optical measured power being a signal measured power above the LOS power threshold.

9. (currently amended) An apparatus for operating an electronically controlled variable optical attenuator (eVOA) inserted in an optical path of an optical signal ~~propagating in an optical network~~, comprising:

a microcontroller for monitoring an optical signal power at an output of the eVOA;

__ ~~and modulating the attenuation of the eVOA~~ if the monitored optical signal power is below a loss of signal (LOS) power threshold, setting the attenuation of the eVOA to a substantially maximum attenuation (MaxAtt); and

~~the~~ modulating the attenuation of the eVOA ~~being performed as~~ by decreasing and increasing of the eVOA attenuation in steps until the optical signal power is detected above the LOS threshold, or a~~t~~he maximum ~~eVOA~~ attenuation (MaxAtt) is reached.

10. (original) A method of operating a plurality of eVOAs inserted in optical paths of optical signals propagating in an optical network, comprising the steps of:

(a) selecting an eVOA from the plurality of eVOAs;

(b) operating the selected eVOA according to the method of claim 1 within a time period allocated for the selected eVOA;

(c) repeating the steps (a) to (b) until all eVOAs from the plurality of eVOAs have been selected; and

(d) repeating the steps (a) to (c) as required.

11. (original) A method as described in claim 10, wherein the step of selecting the eVOA from the plurality of eVOAs comprises a step of continuously cycling said eVOAs in a specified time period "T', wherein "T" is a sum of all time periods $\{t_i$ and i=1, ..., n}, "n" is the number of eVOAs, n >1, and $t_i$ is the time for actively controlling each eVOA.

12. (original) A method as described in claim 11, wherein the step of cycling comprises choosing $t_1 = t_2 = t_i = t_n = \tau$, $\tau$ = T/n, and $\tau$ is the time for actively controlling each eVOA.

13. (original) A method as described in claim 10, wherein the cycling through the plurality of eVOAs comprises taking a finite time "$T_s$" for each attenuation step, and $\tau = S_1 \cdot T_s < \frac{T}{n}$, wherein "$T_s$" being the expected optical control system power transient time, and $S_1$ is the maximum number of steps for decreasing the eVOA attenuation.

14. (original) A method as described in claim 10, wherein cycling through the plurality of eVOAs comprises taking a finite time "$T_s$" for each attenuation step, and $\tau = S_2 \cdot T_s < \frac{T}{n}$, wherein "$T_s$" being the expected optical control system power transient time, and $S_2$ is the maximum number of steps for increasing the eVOA attenuation.

15. (currently amended) An apparatus for operating a plurality of eVOAs inserted in optical paths of optical signals ~~propagating in an optical network~~, the apparatus comprising a microcontroller having:

    (a) a means for selecting an eVOA from the plurality of eVOAs; and

    (b) a means for operating the selected eVOA according to the method of claim 1 within a time period allocated for the selected eVOA.